OIPE

RAW SEQUENCE LISTING   DATE: 07/09/2002
PATENT APPLICATION: US/10/060,793   TIME: 16:22:19

Input Set : A:\6884usol.txt
Output Set: N:\CRF3\07092002\J060793.raw

```
    4 <110> APPLICANT: Abbott Laboratories
    5        Mukerji, Pradip
    6        Huang, Yung-Sheng
    7 ·      Pereira, Suzette L.
    9 <120> TITLE OF INVENTION: DESATURASE GENES, ENZYMES ENCODED
   10        THEREBY, AND USES THEREOF
   12 <130> FILE REFERENCE: 6884.US.Ol
   14 <140> CURRENT APPLICATION NUMBER: 10/060,793
C--> 15 <141> CURRENT FILING DATE: 2002-06-24
   17 <160> NUMBER OF SEQ ID NOS: 60
   19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
   21 <210> SEQ ID NO: 1
   22 <211> LENGTH: 36
   23 <212> TYPE: DNA
   24 <213> ORGANISM: Artificial Sequence
   26 <220> FEATURE:
   27 <223> OTHER INFORMATION: Forward Primer RO1144
   29 <400> SEQUENCE: 1
   30 atccgcgccg ccatccccaa gcactgctgg gtcaag                      36
   32 <210> SEQ ID NO: 2
   33 <211> LENGTH: 45
   34 <212> TYPE: DNA
   35 <213> ORGANISM: Artificial Sequence
   37 <220> FEATURE:
   38 <223> OTHER INFORMATION: Forward Primer RO1119
W--> 40 <221> NAME/KEY: misc_feature
   41 <222> LOCATION: (21)...(21)
   42 <223> OTHER INFORMATION: y = t/u or c at position 21
W--> 44 <221> misc_feature
   45 <222> LOCATION: (33)...(33)
   46 <223> OTHER INFORMATION: y = t/u or c at position 33
W--> 48 <400> 2
   49 gccctcttcg tcctcggcca ygactgcggc cayggctcgt tctcg            45
   51 <210> SEQ ID NO: 3
   52 <211> LENGTH: 45
   53 <212> TYPE: DNA
   54 <213> ORGANISM: Artificial Sequence
   56 <220> FEATURE:
   57 <223> OTHER INFORMATION: Reverse Primer RO1118
W--> 59 <221> NAME/KEY: misc_feature
   60 <222> LOCATION: (4)...(4)
   61 <223> OTHER INFORMATION: r = g or a at position 4
W--> 63 <221> misc_feature
```

ENTERED

```
                    RAW SEQUENCE LISTING            DATE: 07/09/2002
                    PATENT APPLICATION: US/10/060,793    TIME: 16:22:19

                    Input Set : A:\6884usol.txt
                    Output Set: N:\CRF3\07092002\J060793.raw

     64 <222> LOCATION: (10)...(10)
     65 <223> OTHER INFORMATION: r = g or a at position 10
W--> 67 <221> misc_feature
     68 <222> LOCATION: (30)...(31)
     69 <223> OTHER INFORMATION: r = g or a at positions 30-31
W--> 71 <221> misc_feature
     72 <222> LOCATION: (34)...(34)
     73 <223> OTHER INFORMATION: r = g or a at position 34
W--> 75 <221> misc_feature
     76 <222> LOCATION: (38)...(38)
     77 <223> OTHER INFORMATION: r = g or a at poisition 38
W--> 79 <221> misc_feature
     80 <222> LOCATION: (39)...(39)
     81 <223> OTHER INFORMATION: y = t/u or c at position 39
W--> 83 <221> misc_feature
     84 <222> LOCATION: (43)...(43)
     85 <223> OTHER INFORMATION: r = g or a at position 43
W--> 87 <400> 3
     88 gagrtggtar tggggatct gggggaagar rtgrtggryg acrtg              45
     90 <210> SEQ ID NO: 4
     91 <211> LENGTH: 45
     92 <212> TYPE: DNA
     93 <213> ORGANISM: Artificial Sequence
     95 <220> FEATURE:
     96 <223> OTHER INFORMATION: Forward Primer RO1121
W--> 98 <221> NAME/KEY: misc_feature
     99 <222> LOCATION: (9)...(9)
    100 <223> OTHER INFORMATION: y = t/u or c at position 9
W--> 102 <221> misc_feature
    103 <222> LOCATION: (27)...(27)
    104 <223> OTHER INFORMATION: y = t/u or c at position 27
W--> 106 <221> misc_feature
    107 <222> LOCATION: (36)...(36)
    108 <223> OTHER INFORMATION: y = t/u or c at position 36
W--> 110 <221> misc_feature
    111 <222> LOCATION: (39)...(39)
    112 <223> OTHER INFORMATION: y = t/u or c at position 39
W--> 114 <400> 4
    115 ccctaccayg gctggcgcat ctcgcaycgc acccaycayc agaac             45
    117 <210> SEQ ID NO: 5
    118 <211> LENGTH: 45
    119 <212> TYPE: DNA
    120 <213> ORGANISM: Artificial Sequence
    122 <220> FEATURE:
    123 <223> OTHER INFORMATION: Reverse Primer RO1122
W--> 125 <221> NAME/KEY: misc_feature
    126 <222> LOCATION: (7)...(7)
    127 <223> OTHER INFORMATION: r = g or a at position 7
W--> 129 <221> misc_feature
```

RAW SEQUENCE LISTING   DATE: 07/09/2002
PATENT APPLICATION: US/10/060,793   TIME: 16:22:19

Input Set : A:\6884uso1.txt
Output Set: N:\CRF3\07092002\J060793.raw

```
      130 <222> LOCATION: (10)...(10)
      131 <223> OTHER INFORMATION: r = g or a at position 10
W--> 133 <221> misc_feature
      134 <222> LOCATION: (37)...(37)
      135 <223> OTHER INFORMATION: r = g or a at position 37
W--> 137 <400> 5
      138 gttctgrtgr tgggtccgrt gcgagatgcg ccagccrtgg taggg                    45
      140 <210> SEQ ID NO: 6
      141 <211> LENGTH: 36
      142 <212> TYPE: DNA
      143 <213> ORGANISM: Artificial Sequence
      145 <220> FEATURE:
      146 <223> OTHER INFORMATION: Forward Primer RO1146
W--> 148 <221> NAME/KEY: misc_feature
      149 <222> LOCATION: (13)...(13)
      150 <223> OTHER INFORMATION: s = g or c at position 13
W--> 152 <221> misc_feature
      153 <222> LOCATION: (19)...(19)
      154 <223> OTHER INFORMATION: k = g or t/u at position 19
W--> 156 <400> 6
      157 ggctcgcact tcsaccccka ctcggacctc ttcgtc                             36
      159 <210> SEQ ID NO: 7
      160 <211> LENGTH: 36
      161 <212> TYPE: DNA
      162 <213> ORGANISM: Artificial Sequence
      164 <220> FEATURE:
      165 <223> OTHER INFORMATION: Reverse Primer RO1147
W--> 167 <221> NAME/KEY: misc_feature
      168 <222> LOCATION: (18)...(18)
      169 <223> OTHER INFORMATION: m = a or c at position 18
W--> 171 <221> misc_feature
      172 <222> LOCATION: (24)...(24)
      173 <223> OTHER INFORMATION: w = a or t/u at position 24
W--> 175 <400> 7
      176 gacgaagagg tccgagtmgg ggtwgaagtg cgagcc                             36
      178 <210> SEQ ID NO: 8
      179 <211> LENGTH: 39
      180 <212> TYPE: DNA
      181 <213> ORGANISM: Artificial Sequence
      183 <220> FEATURE:
      184 <223> OTHER INFORMATION: Reverse Primer RO1148
W--> 186 <221> NAME/KEY: misc_feature
      187 <222> LOCATION: (9)...(9)
      188 <223> OTHER INFORMATION: k = g or t/u at position 9
W--> 190 <221> misc_feature
      191 <222> LOCATION: (30)...(30)
      192 <223> OTHER INFORMATION: w = a or t/u at position 30
W--> 194 <221> misc_feature
      195 <222> LOCATION: (32)...(32)
```

```
               RAW SEQUENCE LISTING              DATE: 07/09/2002
               PATENT APPLICATION:  US/10/060,793  TIME: 16:22:19

               Input Set : A:\6884usol.txt
               Output Set: N:\CRF3\07092002\J060793.raw
```

```
      196 <223> OTHER INFORMATION: s = g or c at position 32
W--> 198 <400> 8
      199 gcgctggakg gtggtgaggc cgccgcggaw gsacgacca                         39
      201 <210> SEQ ID NO: 9
      202 <211> LENGTH: 45
      203 <212> TYPE: DNA
      204 <213> ORGANISM: Artificial Sequence
      206 <220> FEATURE:
      207 <223> OTHER INFORMATION: Reverse Primer RO1114
W--> 209 <221> NAME/KEY: misc_feature
      210 <222> LOCATION: (13)...(13)
      211 <223> OTHER INFORMATION: r = g or a at position 13
W--> 213 <221> misc_feature
      214 <222> LOCATION: (16)...(16)
      215 <223> OTHER INFORMATION: r = g or a at position 16
W--> 217 <221> misc_feature
      218 <222> LOCATION: (25)...(25)
      219 <223> OTHER INFORMATION: r = g or a at position 25
W--> 221 <221> misc_feature
      222 <222> LOCATION: (40)...(40)
      223 <223> OTHER INFORMATION: r = g or a at position 40
W--> 225 <221> misc_feature
      226 <222> LOCATION: (43)...(43)
      227 <223> OTHER INFORMATION: r = g or a at position 43
W--> 229 <400> 9
      230 ctgggggaag agrtgrtgga tgacrtgggt gccgatgtcr tgrtg                  45
      232 <210> SEQ ID NO: 10
      233 <211> LENGTH: 45
      234 <212> TYPE: DNA
      235 <213> ORGANISM: Artificial Sequence
      237 <220> FEATURE:
      238 <223> OTHER INFORMATION: Reverse Primer RO1116
W--> 240 <221> NAME/KEY: misc_feature
      241 <222> LOCATION: (12)...(12)
      242 <223> OTHER INFORMATION: y = t/u or c at position 12
W--> 244 <221> misc_feature
      245 <222> LOCATION: (16)...(16)
      246 <223> OTHER INFORMATION: r = g or a at position 16
W--> 248 <221> misc_feature
      249 <222> LOCATION: (22)...(22)
      250 <223> OTHER INFORMATION: r = g or a at position 22
W--> 252 <221> misc_feature
      253 <222> LOCATION: (33)...(33)
      254 <223> OTHER INFORMATION: k = g or t/u at position 33
W--> 256 <221> misc_feature
      257 <222> LOCATION: (42)...(43)
      258 <223> OTHER INFORMATION: r = g or at at positions 42-43
W--> 260 <400> 10
      261 ggtggcctcg aygagrtggt artgggggat ctkggggaag arrtg                  45
```

```
                    RAW SEQUENCE LISTING            DATE: 07/09/2002
                    PATENT APPLICATION: US/10/060,793   TIME: 16:22:19

                    Input Set : A:\6884usol.txt
                    Output Set: N:\CRF3\07092002\J060793.raw

      263 <210> SEQ ID NO: 11
      264 <211> LENGTH: 45
      265 <212> TYPE: DNA
      266 <213> ORGANISM: Artificial Sequence
      268 <220> FEATURE:
      269 <223> OTHER INFORMATION: Reverse Primer RO1118
W--> 271 <221> NAME/KEY: misc_feature
      272 <222> LOCATION: (4)...(4)
      273 <223> OTHER INFORMATION: r = g or a at position 4
W--> 275 <221> misc_feature
      276 <222> LOCATION: (10)...(10)
      277 <223> OTHER INFORMATION: r = g or a at position 10
W--> 279 <221> misc_feature
      280 <222> LOCATION: (30)...(31)
      281 <223> OTHER INFORMATION: r = g or a at positions 30-31
W--> 283 <221> misc_feature
      284 <222> LOCATION: (34)...(34)
      285 <223> OTHER INFORMATION: r = g or a at position 34
W--> 287 <221> misc_feature
      288 <222> LOCATION: (38)...(38)
      289 <223> OTHER INFORMATION: r = g or a at position 38
W--> 291 <221> misc_feature
      292 <222> LOCATION: (39)...(39)
      293 <223> OTHER INFORMATION: y = t/u or c at position 39
W--> 295 <221> misc_feature
      296 <222> LOCATION: (43)...(43)
      297 <223> OTHER INFORMATION: r = g or a at position 43
W--> 299 <400> 11
      300 gagrtggtar tggggggatct gggggaagar rtgrtggryg acrtg              45
      302 <210> SEQ ID NO: 12
      303 <211> LENGTH: 25
      304 <212> TYPE: DNA
      305 <213> ORGANISM: Artificial Sequence
      307 <220> FEATURE:
      308 <223> OTHER INFORMATION: Forward Primer RO1188
      310 <400> SEQUENCE: 12
      311 tacgcgtacc tcacgtactc gctcg                                     25
      313 <210> SEQ ID NO: 13
      314 <211> LENGTH: 27
      315 <212> TYPE: DNA
      316 <213> ORGANISM: Artificial Sequence
      318 <220> FEATURE:
      319 <223> OTHER INFORMATION: Forward Primer RO1189
      321 <400> SEQUENCE: 13
      322 ttcttgcacc acaacgacga agcgacg                                   27
      324 <210> SEQ ID NO: 14
      325 <211> LENGTH: 25
      326 <212> TYPE: DNA
      327 <213> ORGANISM: Artificial Sequence
```

```
RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 07/09/2002
PATENT APPLICATION:  US/10/060,793      TIME: 16:22:20

Input Set : A:\6884usol.txt
Output Set: N:\CRF3\07092002\J060793.raw
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:44; Xaa Pos. 315,331
Seq#:46; Xaa Pos. 389
Seq#:48; Xaa Pos. 9,403
Seq#:52; Xaa Pos. 5,7
Seq#:53; Xaa Pos. 3,4,11
Seq#:55; Xaa Pos. 2,5,12
Seq#:56; Xaa Pos. 3,6
Seq#:57; Xaa Pos. 2,10,11
Seq#:58; Xaa Pos. 3,11,13,16
Seq#:59; Xaa Pos. 2,5,6,9,11
Seq#:60; Xaa Pos. 6,9
```